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Workforce Issues in Nursing in Queensland: 2001 and 2004

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Abstract

Aims and objectives. The aim of the study was to identify the factors having an impact upon nursing work and to use the results to inform strategic planning of the Queensland Nurses Union.

Background. In 2001 and 2004, a study was undertaken to gather data on the level of satisfaction of nurses with their working life. This paper reports the 2004 results on workload, skill mix, remuneration and morale. Where applicable, the results are compared with 2001 data.

Methods. A questionnaire was mailed to 3000 Assistants-in-Nursing, Enrolled and Registered Nurses in October 2004. All participants were members of the Queensland Nurses Union. The results are reported in three sectors – public, private and aged care. A total of 1349 nurses responded to the survey, a response rate of 45%.

Results. Nurses in the 2004 study believed: their workload was heavy; their skills and experience poorly rewarded; work stress was high; morale was perceived to be poor and, similar to 2001, deteriorating; the skill mix was often inadequate; and the majority of nurses were unable to complete their work in the time available. Nursing morale was found to be associated with autonomy, workplace equipment, workplace safety, teamwork, work stress, the physical demand of nursing work, workload, rewards for skills and experience, career prospects, status of nursing and remuneration.

Conclusions. Overall the findings of the study are consistent with those determined by the 2001 survey.

Relevance to clinical practice. The findings of this study indicate the importance of factors such as workplace autonomy, teamwork, the levels of workplace stress, workload and remuneration on nursing morale. The data also indicate that workplace safety and workplace morale are linked. These findings provide information for policy makers and nurse managers on areas that need to be addressed to retain nurses within aged care, acute hospital and community nursing.

Keywords: autonomy; morale; nurses; Queensland; skill mix; teamwork; workload

Introduction

In 2001 and 2004 the University of Southern Queensland (USQ) in conjunction with the Queensland Nurses' Union (QNU) undertook a study of Enrolled and Registered Nurse (RN) and Assistant-in-Nursing (AINs) members. In Queensland, RNs and Enrolled Nurses (ENs) are qualified to practice nursing and are licensed by the Queensland Nursing Council (QNC), an independent registering authority responsible for the setting and maintaining of nursing standards in the State. Although not licensed by the QNC, AINs work within a nursing model of care. These workers may also have other titles such as Personal Care Assistants or Carers. Regardless of their title, they work under the direct or indirect supervision of a RN.

The study sampling was confined to nurses employed in acute hospitals, community health/domiciliary and aged care. For the purpose of the study, nurses were seen to be employed in the public (government hospitals and community health), private (non-government hospitals and domiciliary care) or aged care (government and non-government providers) sectors.

The latest published Labour Workforce Survey data suggests there were 32 805 RNs and 6491 ENs in Queensland in 2001 of which 90% were in the active nursing workforce (Australian Institute of Health and Welfare 2003). Based on data provided to the Australian Industrial Relations Commission, Queensland Health employs a nursing workforce of around 20 000 (Hawksworth 2004). The exact number of nurses in the private sector is unknown as is the number of AINs employed in Queensland as there is no registering authority or other body that collects these data. In 1996 the number of AINs was estimated to be 5294 or 13% of the nursing workforce (Harding 1999). Currently 12% of QNU members are AINs. Approximately 70% of practicing nurses in Queensland are members of the QNU.

Australia, like other countries, is experiencing a shortage of nurses (Buchan & Calman 2004). In 2004, a labour market intelligence undertaken by the Department of Employment and Workplace Relations show Queensland, South Australia and Western Australia had shortages against all categories of nurse specializations (Health Workforce Australia. 2004).

Shortages of nurses have implications in workforce dynamics, staff morale and patient outcomes. Recent research has linked low staffing levels with poor patient welfare and longer patient stay (Needleman *et al.* 2002, Stanton 2004). Staff-to-patient ratios are used to demonstrate how understaffing and workload have an adverse affect on patient welfare (Buchan 2004). Aiken *et al.* (2002) calculated that for each additional patient per nurse over a 4:1 ratio, there was a seven percent increase in the likelihood of death in surgical patients. Furthermore, those patients in hospitals with the highest patient-to-nurse ratio (eight patients per nurse) had a 31% greater risk of dying than those in hospitals with four patients per RN. The Institute for Health and Socio-Economic Policy projects annual savings of about US\$2 billion a year for California hospitals just from the shorter patient stays that result from lower patient to RN ratios (The Department for Professional Employees AFL-CIO. 2004).

Low staff to patient ratios have an adverse effect on nurses' health and morale (Aiken *et al.* 2002). In Aiken *et al.*'s (2002) study, the authors found that each additional patient per nurse was associated with a 23% increase in the odds of nurse burnout and a 15% increase in the odds of job dissatisfaction. As demonstrated in a study in Australia, staff numbers are inevitably linked to workload. Clare *et al.* (2002) and Day (2005) found that nurses' ability to cope (defined as staff, workloads) was associated with morale. Morale, job satisfaction and health all have major implications to turnover and retention (Aiken *et al.* 2001).

The results of the 2001 study have been previously published (Hegney *et al.* 2003a,b, Parker *et al.* 2003). This paper reports the major findings of the 2004 study as well as providing data on major changes between the 2001 and 2004 studies.

Method

Aim

The aim of the 2001 and 2004 studies was to identify the factors and the change in those factors that have an impact upon nursing work in each of the three main nursing employment sectors in Queensland (aged care, public and private) and to use the results study to inform strategic planning of the QNU.

Research questions

There were three research questions for the 2004 study.

These were:

1. From the perspective of members of the QNU, what are the factors that have an impact upon nursing work in Queensland?
2. How satisfied are members of the QNU with nursing work in Queensland?
3. Have perceptions of and satisfaction with nursing work changed during the period 2001 to 2004?

Procedure

The study was approved by the Human Research and Ethics Committee of the University of Southern Queensland. To comply with the Ethical Principles and the Queensland and Australian Governments Privacy Guidelines and Legislation, the questionnaires (including the reminder) were posted from the QNU to the participants. The research team only had access to the code provided by the QNU, not the names or addresses of the membership. Any material returned because of postal delivery issues were returned to the QNU. The participants were provided with a reply-paid envelope in which to return the questionnaire which came direct to the research team. At no time has the research team had access to the names and addresses of the participants. Similarly, at no time has the QNU access to any identifiable data (only de-identified data have been supplied).

Once the codes had been generated by the QNU, a database of coded numbers was sent to the research team. From these, using random numbers, 1000 participants were randomly selected from each of the three sectors, resulting in a total sample of 3000. The survey, along with a Plain Language Statement and Reply-Paid envelope was mailed to these participants by the QNU. Three weeks after the first mail out, a reminder package was sent to non-respondents.

Sample and sampling design

Of the 3000 participants (1000 from each sector) invited to participate in the 2004 survey, 1349 responded; representing an overall response rate of 45%. The estimated response rates and number of respondents from each sector (after adjusting for discrepancies in sector membership between the QNU database and survey responses and after allowing for respondents who were no longer working in Queensland) were:

- Forty-three per cent ($n = 428$) aged care sector
- Forty-four per cent ($n = 439$) public sector
- Forty-eight per cent ($n = 475$) private sector
- Of the 1349 participants in the 2004 study, 1342 provided information that allowed their allocation to a sector. A total of 1306 (97%) were in paid employment in nursing in Queensland at the time of the study

The survey instrument

The questionnaire was based on that used in the 2001 survey of QNU members. Only minor changes were incorporated, since the instrument had been validated in 2001 and a comparison of changes in responses between 2001 and 2004 was of particular interest. Piloting of the instrument was unwarranted because the data collection process was unchanged from that used for the 2001 study.

Items modified or added to the 2001 questionnaire procedure, however, were pretested by independent experts and potential respondents.

The questionnaire (called 'Your Work, Your Time, Your Life') contained 77 questions divided into eight sections. The sections reported in this paper were:

- Section 1 – Your Current Nursing Employment – asked eight questions relating to current employment, place of main employment and if they were working for a nursing agency.
- Section 3 – Your Working Conditions – contained 21 questions that sought information on their ability to complete work within the paid time available, skill mix, workload, rostering practices, workplace violence and replacement of staff. This section contained one open-ended question on workload issues.
- Section 6 – Your Experience in Nursing – contained eight questions that gathered data on the nurses' perceptions of nursing work as well as the length of time worked in nursing, the number of breaks from nursing and the reason/s for these breaks.

Limitations

To assess the possibility of non-response bias, checks were made against the QNU database in each sector regarding the distributions of gender, age and job designation. No significant difference exists between the gender distribution of the respondents and the gender distribution of the QNU database within each sector. Similarly, there were no significant differences in the distribution of job designation when compared with the database within each sector. Concerns exist, however, regarding bias in the age distribution of respondents in the survey compared with the QNU database. In all three sectors there was evidence that older nurses were relatively over-represented. However, this issue is clouded by the QNU database being incomplete – the ages of about 20% of members are unknown. The effect of this apparent bias was assessed to be insufficient to make a substantive impact upon the findings of the study.

Data analysis

Unlike in 2001, when data were manually entered, the questionnaires were formatted to allow automatic scanning and data entry using *Teleform* (Verity Inc. Sunnyvale, CA, USA). While quantitative data were scanned in, all qualitative data were typed in manually.

Quantitative data

The data were extensively screened and anomalies logged, checked and corrected where appropriate. Comparisons between sectors in the 2004 survey have been made on an item-by-item basis using descriptive and inferential statistical tools as appropriate to the scale of measurement – contingency tables, bar charts and chi-squared testing for categorical data, Kruskal–Wallis and chi-squared testing for ordinal data and mean and standard deviations, F and t procedures for interval data.

Given the large number of comparisons of interest within the 2004 study and between the 2001 and 2004 studies, measures have been taken to protect against false positives in reporting the results. These include a log linear analysis encompassing both the sector and year factors to filter out non-significant effects overall prior to a sector-by-sector analysis of categorical or ordinal data.

Only inferences supported at the 1% level of significance are reported, except where more than one sector exhibits a similar trend or where there is a prior expectation of an effect. In these cases the threshold has been lowered to the 5% level.

Qualitative data

There were three major qualitative data questions in the survey. The data from each returned questionnaire were typed verbatim into a word processing file. Analysis for each question was carried out separately for each of the sectors. Thus, for each question there were three files. A thematic analysis was then undertaken on each of the files. This involved:

- Studying each transcript individually as well as by sector to give a sense of the whole
- Identifying, themes and categories that arose from each question and from each sector
- Developing summative themes and research findings from this analysis

Results

Demographics

Approximately 8% of the nurses in the study were male. The mean age of the participants was 44.1 years, which reflects the ageing nursing workforce in Australia. This is an increase from a mean age of 43.4 years in 2001. There were differences in the mean age of nurses across the sectors, with nurses in the aged care sector having a higher mean age (49.7 years) than nurses in the public (42.8) and private (43.6) sectors. There were a total of 172 AINs, 157 enrolled and 913 RNs in the study. Because of the small numbers of AINs employed in the private and public acute sectors, analysis of differences between levels of nurses was not possible.

Workload

Respondents were asked to indicate if they were able to complete their work to their satisfaction in the paid time available. Highly significant differences exist among the sectors in both 2001 ($\chi^2 = 85.215$; d.f. = 12; $P < 0.001$) and 2004 ($\chi^2 = 142.499$; 16: $P < 0.001$; see Table 1). In 2004 there is little difference in the average response of the nurses in the public and private sectors. However, nurses in the aged care sector on average find it relatively more difficult than public or private sector nurses to complete their job to their satisfaction ($\chi^2 = 75.91$; 4: $P < 0.001$). In the aged care sector, but not in the other two sectors, there is a significant evidence of a change between 2001 and 2004 ($P = 0.014$). Although the average response is still significantly inferior to that of the nurses in the other sectors, a significant improvement on average for aged care nurses is indicated between 2001 and 2004. This difference persists in this sector for RNs, ENs and AINs regardless if they work full-time or part-time or are permanent staff.

Table 1 Ability to complete work in the paid time available

	Aged care		Public		Private	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
2004						
Never or very seldom	67	16.30	19	4.50	19	4.10
Seldom	75	18.20	40	9.40	53	11.60
Sometimes	82	19.90	109	25.70	112	24.50
Mostly	134	32.50	180	42.50	198	43.20
Always or nearly always	54	13.10	76	17.90	76	16.60
Total	412	100.00	424	100.00	458	100.00
2001						
Never or very seldom	79	18.20	21	4.30	12	2.40
Seldom	91	21.00	61	12.40	57	11.50
Sometimes	115	26.60	140	28.50	154	31.20
Mostly	102	23.60	194	39.50	208	42.10
Always or nearly always	46	10.60	75	15.30	63	12.80
Total	433	100.00	491	100.00	494	100.00

Sufficient staff employed in the work unit

There is a highly significant difference (2001; $\chi^2 = 106.532$; 8: $P < 0.001$; 2004 $\chi^2 = 73.357$; 4: $P < 0.001$) across the sectors in the proportion of nurses who believe sufficient staff were employed over

the last six months to meet patient/ client/resident needs (see Table 2). The major source of this difference is the relatively high proportion of aged care nurses who believe that there is 'never' or 'very seldom' sufficient staff to meet needs. Between 2001 and 2004 an improvement in average response to this issue has occurred in the public ($\chi^2 = 13.861$; 4: $P = 0.008$) sector. No such change is apparent in the aged care or private sectors.

Table 2 Sufficient staff employed in the work unit

	Aged care		Public		Private	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
2004						
Never or very seldom	88	21.40	34	8.10	35	7.70
Seldom	96	23.30	66	15.80	96	21.00
Sometimes	74	18.00	119	28.50	136	29.80
Mostly	118	28.60	149	35.60	161	35.20
Always or nearly always	36	8.70	50	12.00	29	6.30
Total	412	100.00	418	100.00	457	100.00
2001						
Never or very seldom	112	25.80	45	9.20	30	6.10
Seldom	121	27.90	112	23.00	119	24.20
Sometimes	76	17.50	145	29.80	156	31.70
Mostly	101	23.30	151	31.00	155	31.50
Always or nearly always	24	5.50	34	7.00	32	6.50
Total	434	100.00	487	100.00	492	100.00

Skill mix

Using a five point Likert scale, the respondents were asked to indicate if there was 'always or nearly always, mostly, sometimes, seldom, or never or very seldom' adequate skill mix to meet patient/client/resident needs. The data in Table 3 reveal that in both 2001 and 2004 there is a highly significant difference across sectors in the proportion of nurses who believe skill mix is adequate (2001; $\chi^2 = 102.669$; 8; $P < 0.001$; 2004 $\chi^2 = 50.486$; 4; $P < 0.001$) with nurses in the aged care sector most likely to indicate an inadequacy. There is good evidence in the aged care sector ($\chi^2 = 16.695$; 8; $P = 0.002$) and weaker evidence in the public sector ($\chi^2 = 11.593$; 8; $P = 0.018$) of differences between 2001 and 2004. In the aged care sector, on average, there is significant evidence of an improvement in the perceived adequacy of skill mix support. In the public sector, the main reason for the difference between 2001 and 2004 is the relatively higher response of 'always or nearly always' to this question. However, in terms of average response, there is little change between 2001 and 2004.

Workload

Nurses were asked to specify their perceptions of their workload from options ranging from 'workload is heavy' to 'workload is light' (see Fig. 1). There is very strong evidence (2001; $\chi^2 = 103.215$; 12; $P < 0.001$; 2004 $\chi^2 = 118.603$; 4; $P < 0.001$) of a difference across the sectors with respect to perceived workload in nursing in both 2001 and in 2004. In 2004 the major reason for this difference is the relatively high percentage of aged care nurses reporting an extremely heavy workload compared with the other two sectors. On average, aged care nurses report a substantially heavier workload than private sector nurses (2001; $\chi^2 = 62.053$; 6; $P < 0.001$; 2004 $\chi^2 = 65.647$; 6; $P < 0.001$), whose average response does not differ significantly from public sector nurses. There is no indication of a change between 2001 and 2004 in any sector.

Table 3 Perceptions of the adequacy of skill mix

	Aged care		Public		Private	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
2004						
Never or very seldom	52	12.60	11	2.60	18	4.00
Seldom	67	16.20	53	12.70	61	13.40
Sometimes	103	24.90	121	28.90	119	26.20
Mostly	134	32.40	155	37.10	189	41.50
Always or nearly always	57	13.80	78	18.70	68	14.90
Total	413	100.00	418	100.00	455	100.00
2001						
Never or very seldom	62	14.30	13	2.70	14	2.80
Seldom	111	25.60	52	10.70	74	15.00
Sometimes	103	23.80	156	32.00	154	31.20
Mostly	121	27.90	211	43.30	192	38.90
Always or nearly always	36	8.30	55	11.30	59	12.00
Total	433	100.00	487	100.00	493	100.00

In addition to the quantitative data, the 547 respondents provided comments on workload and skill mix. While at least 50% of the nurses in all sectors noted that workload issues were reported (either formally through committees or informally through nurse managers/facility managers), at least 20% in each sector believed that 'nothing was done'.

For example:

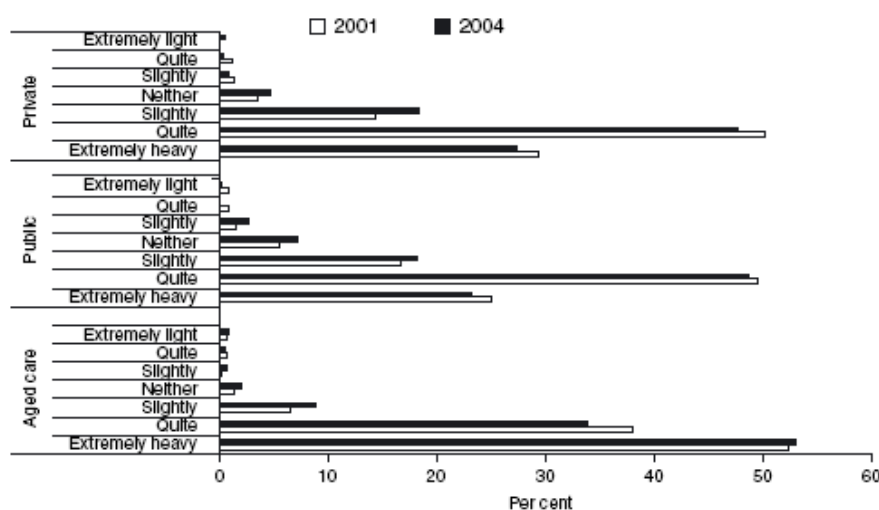
There is a workload committee – however we never hear from them and they never respond to issues that occur.

Workload issues are ignored by management.

In contrast, at least 20% of nurses in the sectors reported that action was taken. For example:

Immediate discussion with Clinical Nurse Consultant (CNC) in relation to inadequate staffing levels. They do try and get extra staff from other wards or agency staff, otherwise no new acute admissions to the ward.

Most requests for more staff are approved as long as rostering is viable and skill mix is appropriate.

**Figure 1** Perceptions of workload being heavy or light

These comments reflected those provided by the respondents in the two final questions. These open-ended questions asked what the nurses believed should be the focus of the QNU for the next 12 months as well as also providing some space to allow nurses to provide unsolicited comments in general about their nursing work. In the first question, issues around workload, staffing, skill mix was the second ranked theme (aged care 37%; private 48% and public 51%) and in the latter question, workload issues were the most cited issues raised (aged care, 47%, private 79%, public 34%).

For example:

Maybe the QNU could focus more on getting more nurses on the floor and less on increasing wages. If there were more people to carry the workload job satisfaction would be a lot higher. High wages do not really compensate for lack of job satisfaction and we don't realistically appear to be able to have both. MAYBE THE QNU COULD BE THE FIRST UNION TO PUSH FOR HIGHER JOB SATISFACTION INSTEAD OF HIGHER WAGES [respondent's emphasis].

...the acuity rate has increased, patients are sicker, requiring more one on one within the ward. Standards of care hence decrease, leaving nurses feeling frustrated with the care they can deliver.

...dangerous overcrowding of our [name of unit] due to budgetary shuffling are leaving us working in dangerous overcrowded and overwhelming conditions. Effect on morale is high with staff leaving, which compounds the problem.

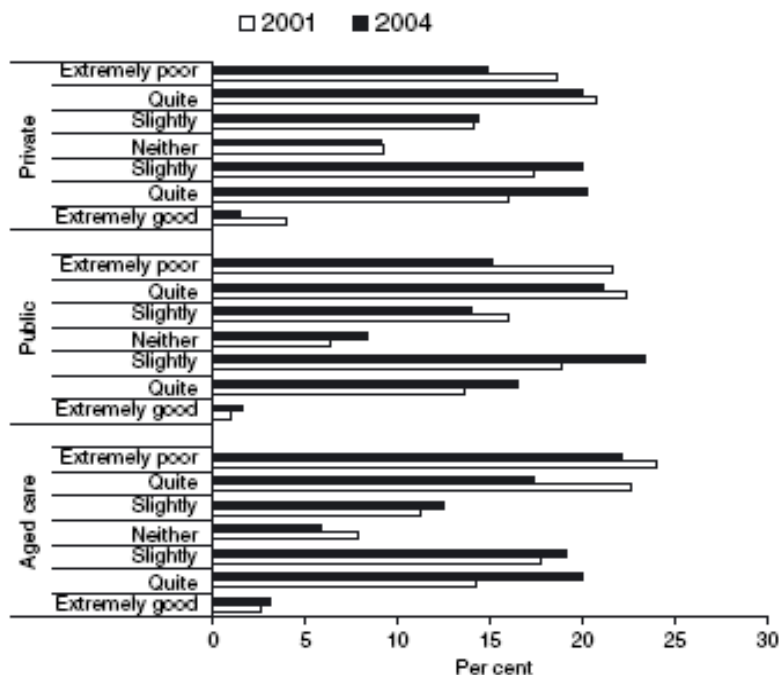


Figure 2 Level of morale

Morale

Approximately 40% of nurses in all sectors believed that morale was 'extremely or quite' poor. There were no differences across sectors and no changes in perceptions of staff morale between 2001 and 2004 (see Fig. 2). Respondents were more likely to perceive that morale was deteriorating than improving. Again there were no significant differences across the sectors or between 2001 and 2004 ($P > 0.05$ in all cases; see Fig. 3).

Across all sectors in both 2001 and 2004, while there was no significant difference in the perceived level of morale between male and female nurses in any sector or year, staff morale is significantly associated with: how autonomy was encouraged, workplace equipment levels, perceptions of the safety of the workplace, level of teamwork and support from colleagues, deteriorating staff morale, work stress, the physical demand of nursing work, workload, rewards for skills and experience, career prospects, status of career, nursing work valued in community and in health sector and remuneration ($r^2 > 10\%$, $P < 0.001$ in all cases).

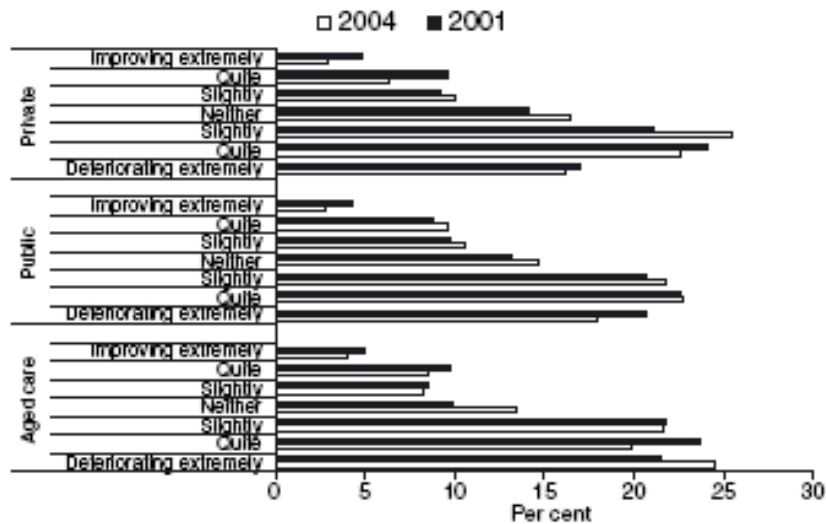


Figure 3 Morale improving or deteriorating

Work stress

This question asked respondents to indicate if work stress was 'high' or 'low'. There is strong evidence (2001; $\chi^2 = 62.529$; d.f. = 12; $P < 0.001$; 2004 $\chi^2 = 51.127$; d.f. = 12; $P < 0.001$) of a difference across the sectors, with nurses in the aged care sector reporting relatively higher levels of extremely high work stress (see Fig. 4). However, a majority of nurses (83% aged care, 69% public and 72% private sectors) reported 'extreme or quite' high work stress. There was no change in levels of reported work stress between 2001 and 2004.

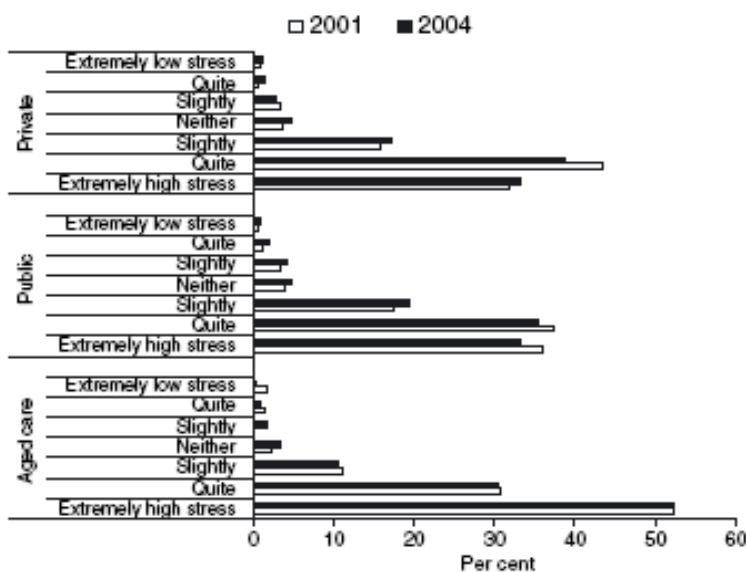


Figure 4 Work stress

Remuneration

There is a strong difference across the sectors with respect to the perception of adequacy of pay (2001; $\chi^2 = 64.532$; d.f. = 12; $P < 0.001$; 2004 $\chi^2 = 70.975$; d.f. = 12; $P < 0.001$). While nurses in the aged care sector were more likely to believe that their pay rate was 'extremely or quite' poor (46%), nurses in the other sectors were similarly dissatisfied with their remuneration (25% public and 38% private sectors) (see Fig. 5).

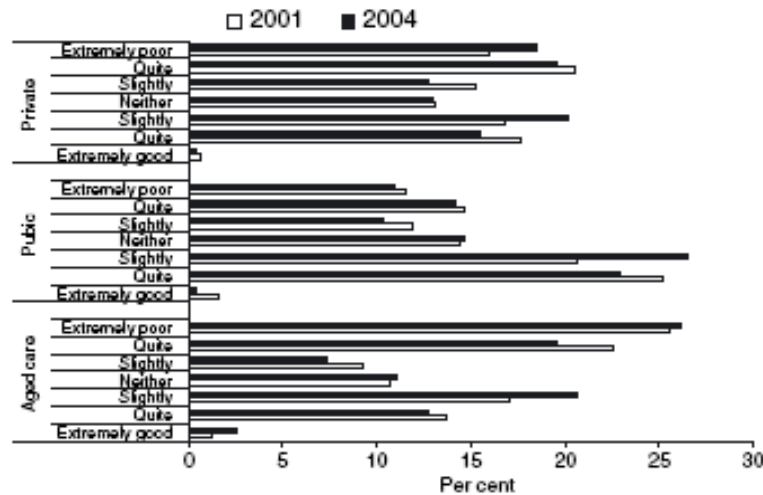


Figure 5 Perceptions of remuneration by sector

Rewards for skills and experience

Over one-third of nurses in the study believed that they were 'extremely or quite' poorly rewarded for the skills and experience they brought to their workplace (aged care 39%, public 37% and private 40%) (see Fig. 6). There was no significant difference across the sectors or between the 2001 and 2004 data ($P > 0.05$ in all cases).

Remuneration and rewards for skills and experience were themes within the open-ended final questions. In particular, 79% of nurses in the private and public sectors and 81% of nurses in the aged care sector believed that remuneration and conditions should be a priority of focus of the QNU. One respondent's comments are indicative of the general feelings about pay:

... Improvement of pay to reflect the stress and life changing decisions nurses have to make.

In the private and aged care sectors, where nurses are paid less than nurses in the public sector, the respondents believed that parity of wages should be achieved as soon as possible. As one respondent noted:

Why is there a difference [in pay] between the private and public sectors?

Another person noted:

... people working in our local citrus industry packing citrus have a higher rate of pay than nurses.

One nurse's comment summed up the feelings about remuneration.

I love my job and I enjoy going to work ...but that does not mean I think I am adequately paid. We should be ashamed of the hourly rate we get and make more demands from private institutions and government.

Within the qualitative data there was a theme that we called 'images of nursing'. These images could be linked with morale. While some of the images were positive, others were negative. Examples are:

When I first started my nursing career I felt so proud to put on my uniform. The prestige that went with the job lifted my self-confidence greatly. Now I have a job to get myself to put on the uniform as it makes me a target for abuse, harassment, workplace bullying, very little job satisfaction.

I love my job and I love to help my clients. Realistically there are never enough hours in the day, but I find it personally satisfying to stay behind and make sure my job is done and my clients are maintained.

In many of the comments, both positive and negative, it was apparent that how local management dealt with the respondents influenced how they felt about nursing work. Many nurses believed that decisions driven by cost control were detrimental to the care nurses could provide to patients:

Nurses are fed up. No respect working, working to care for people and they [management] just cut costs. It's all money in the private and public sectors.

...most struggles are put down to a lack of funding but genuine encouragement and recognition doesn't always cost money.

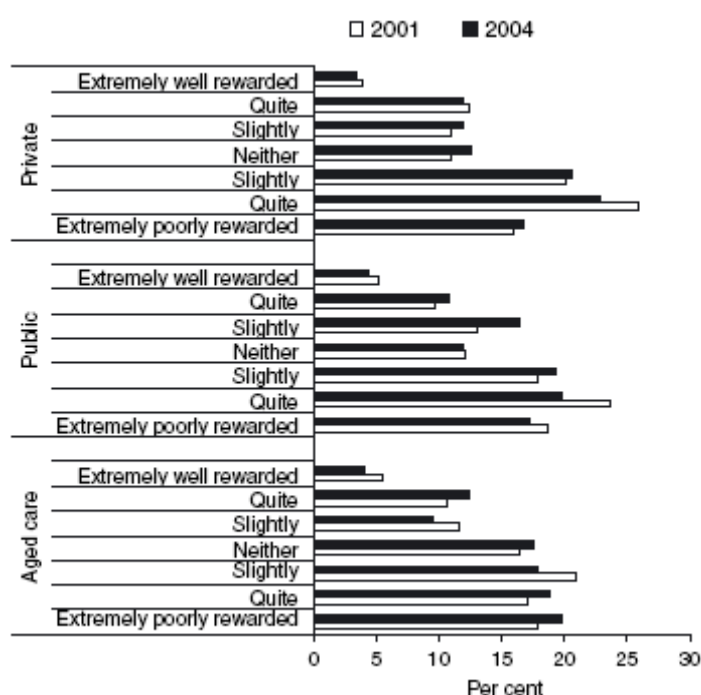


Figure 6 Perceptions of adequate reward for skills and experience

Discussion

Job satisfaction and in particular job dissatisfaction has many ramifications including quality of care and turnover. Reasons for dissatisfaction are numerous and this study has defined some of them. The implications of the findings will now be discussed.

Workload

In response to two separate questions nurses recorded their opinions on workload. In excess of 90% of nurses graded their workload as heavy. In addition they noted that they cannot complete their work to their own satisfaction in the allotted time. Although it is encouraging that some improvement has been seen in the aged care sector since 2001, this issue is still greatest in this sector with less than half of the nurses believing that they can always or mostly do their work in the allotted time. These data are also in accord with recent research undertaken in three hospitals in South East Queensland (Day 2005).

In our study this problem was worst in the aged care nursing workforce where a third of nurses consider that seldom or never were they able to complete their work in the paid time available

compared with <15% of nurses in the other sectors. Workload has been cited as the principle cause for nurses considering leaving their workplace and their profession (Best Practice Australia Pty Ltd 2003). Judged by the volume of unsolicited text comments workload was certainly of prime importance to the nurses in this study.

Nurses were not asked if their success or failure to complete work in the available time was directly attributable to staff numbers or skill mix. However, from proffered comments and responses to other questions it is reasonable to assume this was the case. Aged care nurses were far more likely to indicate that staff numbers are insufficient to meet patient needs than were nurses in the other two sectors. However, in none of the sectors did more than 40% of nurses consider that staff numbers were adequate. This is a critical observation for both nurses and client safety (Aiken *et al.* 2002). It is also worth noting that nurses are somewhat prepared to accept a heavy workload. This is borne out by the fact that the proportion of nurses who considered staff to be insufficient was over 10% greater than the proportion who reported that they were unable to finish their work.

Buchan (2004) noted, in a report to the Royal College of Nursing, the traditional views of staff numbers being determined by local management is being challenged by the increasing number of reports on patient welfare and nurse to patient ratios. In general higher staff-to-patient ratios result in not only improvements in medical outcomes but also large reductions in associated medical costs such as time in hospital, readmissions, complications and so forth. No detailed analysis of cost of the additional staff is offered by many of these reports.

Skill mix

In general, a richer mix of staff improves patient outcomes although relationship between staffing levels, mix and outcomes is complex (Buchan 2004). Skill mix is a major identified factor affecting the nursing environments in Queensland. Only half of all nurses perceived skill mix to be adequate at a level more than 'sometimes' Again aged care respondents expressed concern, although as with the question related to the number of staff employed in the ward/unit, there was a trend for an improvement since 2001. In all sectors adequacy of skill mix was qualified by the nurses as being largely a case of too few experienced nurses and too many inexperienced ones. Nearly half of the aged care nurses indicated that insufficient funding was a contributory factor. In comparison private and public sector nurses were much more likely to see the numbers of casuals, agency and relief staff as factors influencing skill mix.

These issues are of major concern to the respondents as illustrated by large numbers who suggested that workload issues should be a QNU focus. Workload and related issues such as understaffing or appropriate staffing can cause turnover which then compounds the problem. Resolving the issue of understaffing is not a case of simply employing more staff. Rather, it is influenced by the availability and cost of a larger workforce.

Morale and work stress

In 2001 morale was low and this has not improved in the 2004 study. A workforce where 40% of nurses consider morale to be 'poor' and 'deteriorating' does not bode well for the profession. Nor does it bode well for patient care. Work stress, a major factor influencing morale, is extremely high especially in the aged care sector.

Morale is affected by response of management to issues. In this study, while some nurses recognized that their workload concerns were addressed, an equal number of nurses believed that nothing was done when workload issues were raised. Similar results were found by Day (2005) who noted that 65% of nurses in his study believed that administration did not listen or respond to their concerns and ideas. The results suggest, therefore, that there needs to be an improvement in line management attitudes with a greater valuing of nurses.

Remuneration

Remuneration is often touted as the principal reason for job dissatisfaction and certainly is identified by nurses as being a major reason for considering leaving a job (Best Practice Australia Pty Ltd 2003). In this study 50% of nurses in both the private and aged care sectors considered their wages to be poor. This was 15% higher than in the public sector where 50% of nurses believed their pay was adequate or better. However, it is extremely interesting to note that, in the few studies that have been undertaken with nurses who have actually left their employment, that remuneration was not given as the main reason for leaving (Nursing and Health Services Research Consortium 2001, 2001). Recent studies support the view that remuneration is not the primary reason that nurses leave their workplace (Cowin & Jacobsson 2003, Day 2005).

Conclusion

This study presents the findings of two surveys of nurses of the QNU. In both 2001 and 2004, staffing numbers and skill mix, factors that have an impact on patient safety, length of stay and patient outcomes, were shown to have a major effect on staff morale of nurses in Queensland.

It is apparent that from a workforce perspective, if employers are to retain nurses within the nursing workforce, that these factors must be addressed. If they are not addressed, not only will the nursing workforce continue to exhibit high turnover, but it is possible that there will be increasing litigation against employers of nurses who continue to ignore the international evidence on RN to patient ratios.

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Contributions

- Study design: Desley Hegney 25%, Ashley Plank 25%, Victoria Parker 25%, Elizabeth Buikstra 25%
- Data collection and analysis: Desley Hegney 25%, Ashley Plank 30%, Victoria Parker 15%, Elizabeth Buikstra 20%, Robert Eley 10%
- Manuscript preparation: Desley Hegney 40%, Ashley Plank 5%, Victoria Parker 5%, Elizabeth Buikstra 10%, Robert Eley 40%

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